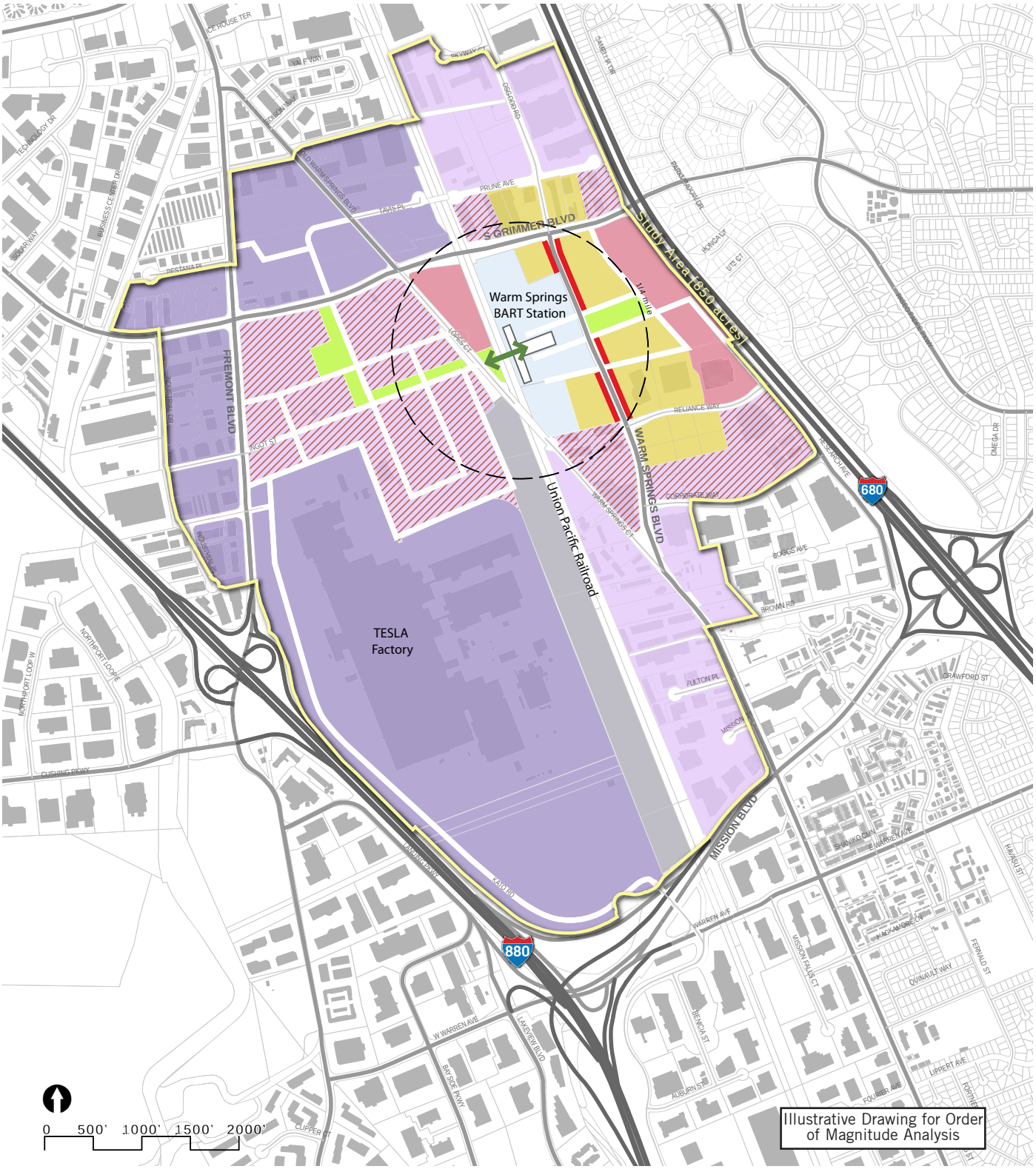
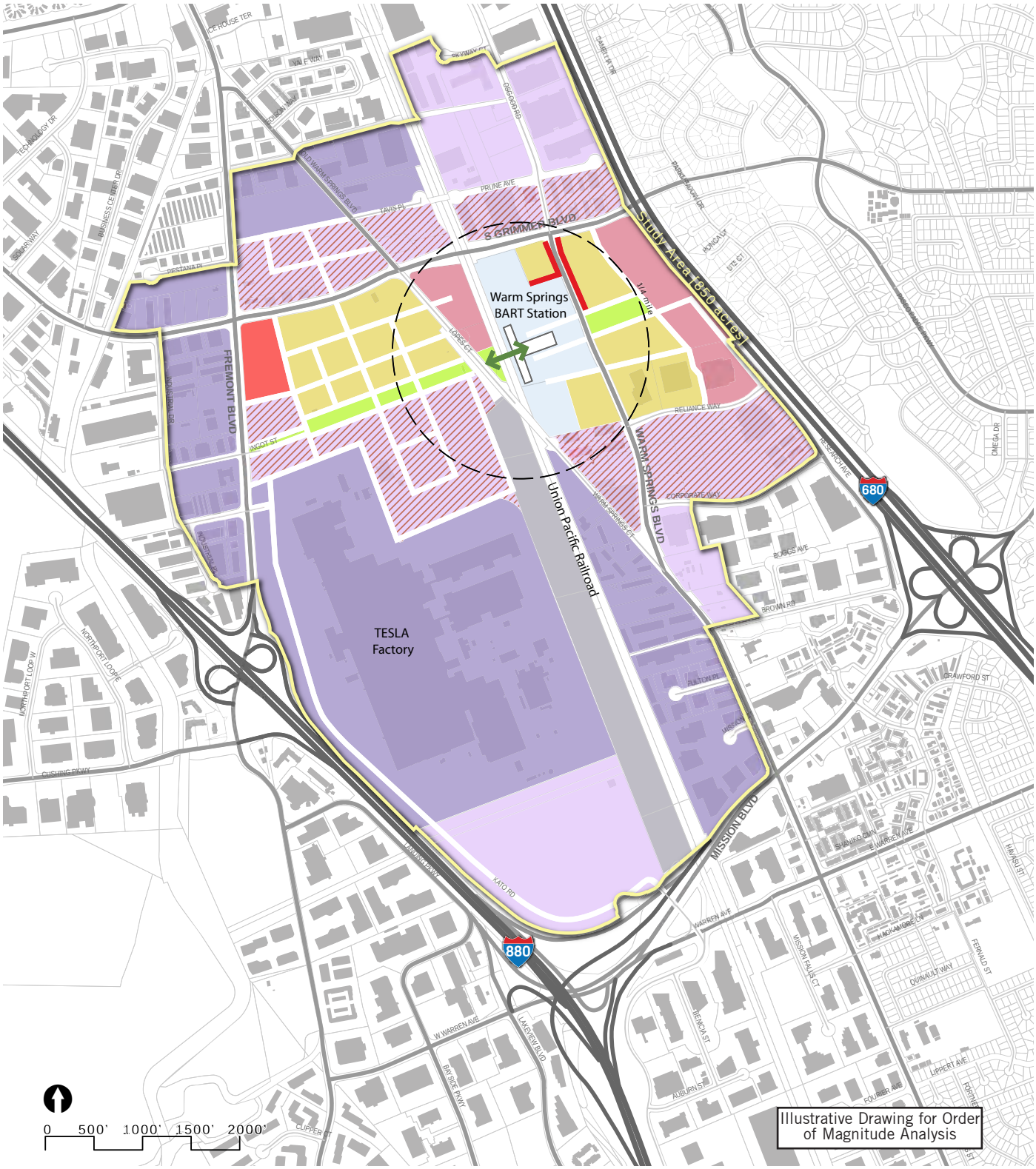
Figure 7: Land Use Alternative 2 - Innovation Campus/Residential TOD



Industrial - General Industrial/Manufacturing	Commercial - Retail Center	BART
Industrial - Technology/Research & Development	Residential - High Density (includes support services such as retail, schools, and parks)	Railroad / Railyard
Commercial/Industrial - Office/Research & Development (Could include Special Uses such as entertainment, community facilities, and hotels)	Open Space	
Commercial High Tech Office (Could include Special Uses such as entertainment, community facilities, and hotels)	Retail Frontage	

Note: A minimum of 15 acres of rail-related uses may be developed on Parcel 1, which could affect long-term build-out. If this were to occur, employment and development assumptions may potentially be relocated to other portions of the Study Area.

Figure 8: Land Use Alternative 3 - Innovation District/Residential Mixed-Use



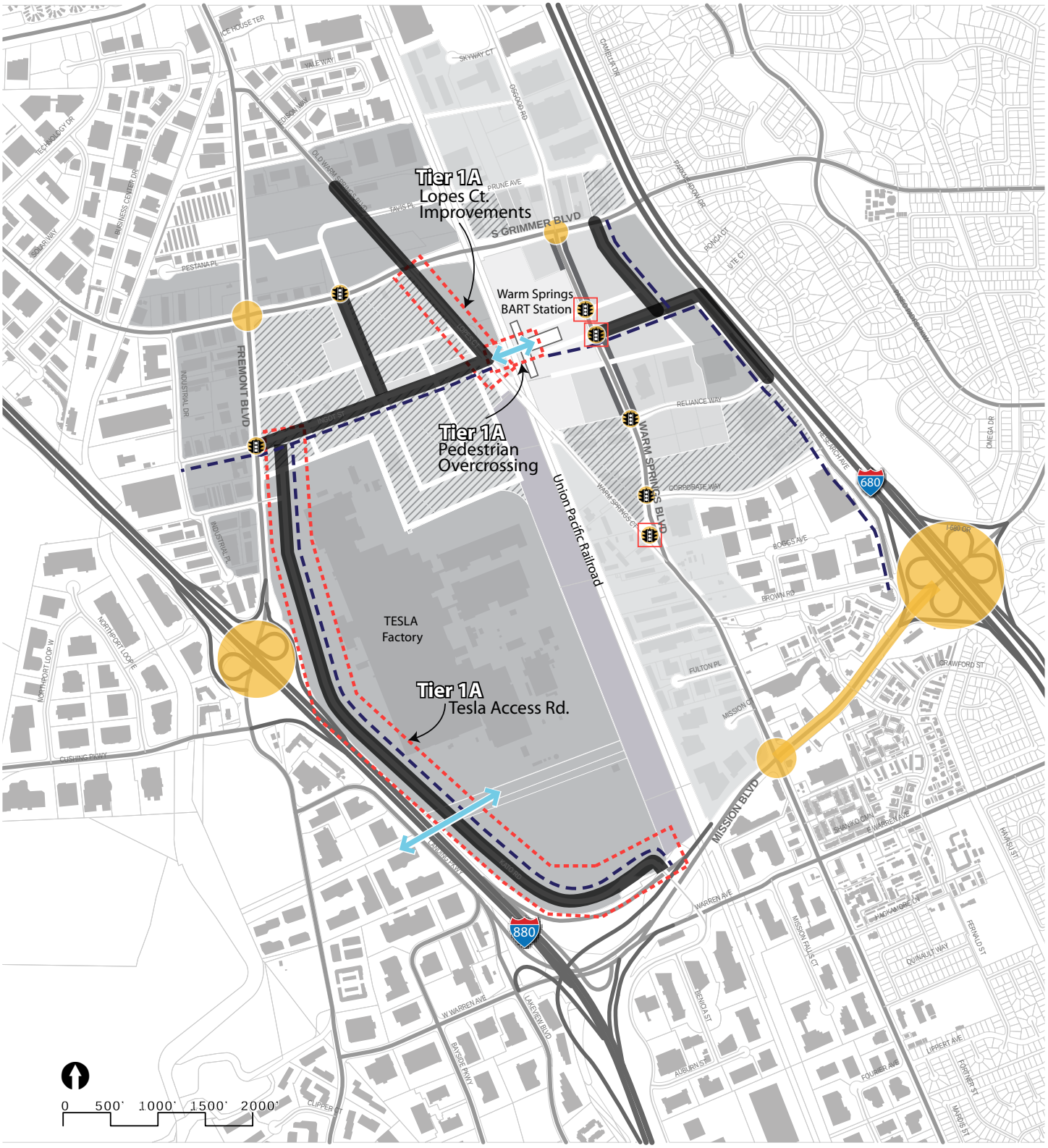
TRANSPORTATION INFRASTRUCTURE IMPROVEMENTS

The transportation setting of the South Fremont/Warm Springs Area Studies will serve as a remarkable draw for economic growth, offering a full range of modal choices from heavy rail service and access, to the new BART service, to local buses, bike and pedestrian routes along with multi-route regional highway access. Though this represents an excellent transportation setting for growth, the three alternatives do place some specific demands on the system and would be well served by phased improvements to enhance the success of area economic growth.

Among the alternatives there are subtle differences in terms of the content and phasing of improvements, and these are reported here on Figure 10 which lists and schedules those improvements in terms of Tiers. The map that accompanies this table (Figure 9) indicates the location of the potential improvements with Alternative 2 pictured as the base plan for reference. The full list of transportation improvements, pictured here, is organized according to the recommended timing of those improvements/investments. The three phases or "Tiers" of improvement are as follows:

- Tier 1A – These are the highest priority projects, and have been determined to be essential to allow South Fremont/Warm Springs to compete in the early years of development
- Tier 1 – These are the "backbone" improvements considered higher priority. These improvements should be planned for in order to facilitate development in the Study Area.
- Tier 2 – These improvements are less critical and can occur as the Study Area becomes more developed, and often in conjunction with investment in new or improved land uses or significant employment growth.

Figure 9: Transportation Infrastructure Improvements: Land Use Alternative 2 (Innovation Campus/Residential TOD)



Transportation Improvements Legend

- Pedestrian Improvements
- Traffic Improvements
- Tier 1: Backbone Street Network
- Tier 1: Bicycle Network
- Tier 1A Improvements
- Funded Signalization Project
- Proposed Signalization

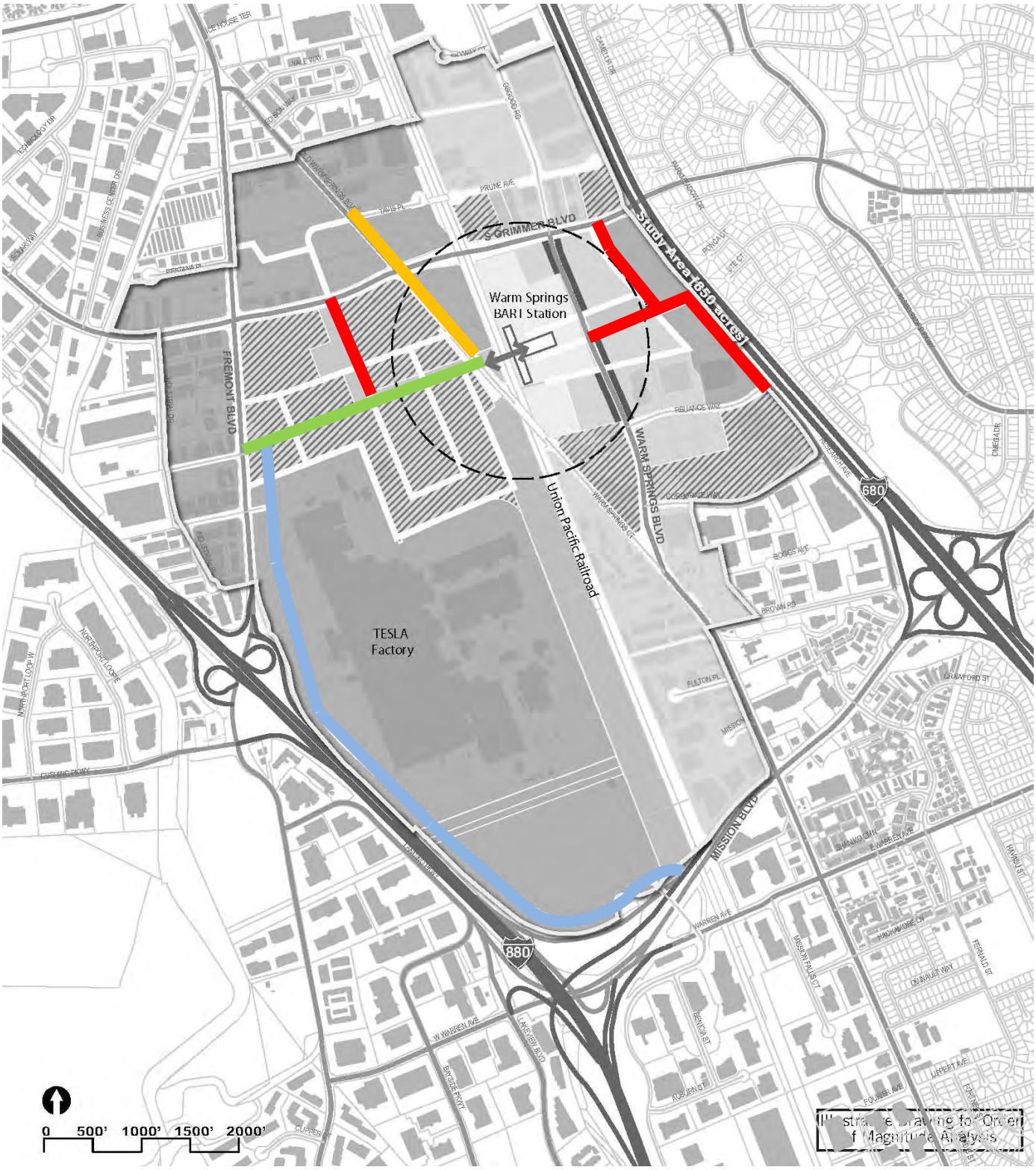
Notes:
Some improvements outside the study area are not included on this map

Figure 10: Fremont Study Area Transportation Strategies

	Alternative 1	Alternative 2	Alternative 3
Traffic and Roadway Improvements			
Interchange Improvements			
I-680 / Mission Boulevard interchange	Tier 1	Tier 1	Tier 1
I-680 / Auto Mall Parkway interchange	Tier 1	Tier 1	Tier 1
I-880 / Fremont Boulevard interchange	Tier 1	Tier 1	Tier 1
Intersection Improvements			
South Grimmer Boulevard / Warm Springs Boulevard / Osgood Road	Tier 1	Tier 1	Tier 1
Fremont Boulevard / South Grimmer Boulevard	Tier 1	Tier 1	Tier 1
New Signals			
Fremont Boulevard / Ingot Street	Tier 1	Tier 1	Tier 1
South Grimmer Boulevard / New N/S Road (Parcel 1)	Tier 1	Tier 1	Tier 1
Warm Springs Boulevard / Reliance Way	Tier 1	Tier 1	Tier 1
Warm Springs Boulevard / Corporate Way	Tier 1	Tier 1	Tier 1
Local Street Connections & New Streets			
Extend Research Avenue to E/W road connecting to BART Station and provide connection to Grimmer Boulevard	Tier 1	Tier 1	Tier 1
Convert the Tesla Factory access road to a public access road	Tier 1A	Tier 1A	Tier 1A
Extend Ingot Street east to BART station	Tier 1	Tier 1	Tier 1
Add N-S street between Ingot Street extension and Grimmer Boulevard (on Parcel 1)	Tier 1	Tier 1	Tier 1
Widen and add streetscape features to Lopes Court (this is considered a Tier 1A improvement south of Grimmer Boulevard, and a Tier 1 improvement north of Grimmer)	Tier 1A or 1	Tier 1A or 1	Tier 1A or 1
Transit Improvements			
Bus stop enhancements (shelters, benches, lighting, real-time passenger information)	Tier 1	Tier 1	Tier 1
Circulator shuttle bus	Tier 2	Tier 2	Tier 2
Evaluate Fremont Boulevard streetcar or BRT	Tier 2	Tier 2	Tier 2
Increase bus frequencies on Warm Springs Boulevard	Tier 2	Tier 2	Tier 2
Pedestrian Improvements			
BART west side pedestrian access bridge	Tier 1A	Tier 1A	Tier 1A
Streetscaping on all new Backbone Streets	Tier 1A or 1	Tier 1A or 1	Tier 1A or 1
Provide pedestrian improvements at key intersections	Tier 1	Tier 1	Tier 1
Bicycle Improvements			
East-West Bicycle Connections			
Class II bike lanes on Ingot Street and new BART Station E/W Road	Tier 1	Tier 1	Tier 1
I-880 bike/ped overcrossing from Tesla Factory Access Road to Landing Parkway	N/A	Tier 1	Tier 1
Tesla Factory canal bike/ped pathway	N/A	Tier 2	Tier 2
North-South Bicycle Connections			
Class II bike path on Research Avenue	Tier 1	Tier 1	Tier 1
Railroad alignment pathway	N/A	Tier 2	Tier 2
Class II path extension on Fremont Boulevard (from Ingot Street south across I-880) and Fremont Boulevard / I-880 interchange bike access improvements	Tier 2	Tier 2	Tier 2

Notes:
1. Highlighted blue cells indicate improvement applies to a particular alternative
2. Streetscaping includes ADA compliant sidewalk furniture, pedestrian amenities, on-street parking and landscaping

Figure 11: Utility Infrastructure Improvements: Land Use Alternative 2 (Innovation Campus/Residential TOD)



	UTILITY IMPROVEMENTS			
	Sewer Main	Water Main	Storm Drain	Joint Trench
New 2-Lane Road	FULL	FULL	FULL	FULL
New 4-Lane Road	FULL	FULL	FULL	FULL
2-Lane Tesla Frontage Road Conversion	650 LF	FULL	FULL	FULL
2-Lane Lopes Court Widening	N/A	HALF	HALF	FULL

Notes:
"FULL" represents improvements required over full length of street;
"HALF" represents improvements required over half length of street;
"X LF" represents improvements required over a specific distance;
"N/A" represents no improvements required.

UTILITY INFRASTRUCTURE IMPROVEMENTS

The Study Area benefits from a well-developed regional water, sewer and storm infrastructure network that has sufficient capacity to accommodate the three alternatives' proposed land uses and densities. This is yet another benefit to the high job growth industries and technology employers who are being targeted for this area.

New utility infrastructure improvements are substantially limited to extending facilities to the various development parcels within new streets or streets identified by the traffic study to be improved.

The map on the facing page (Figure 11) locates all of the anticipated roadway changes and correlates them with utility improvements in terms of sewer mains, water mains, storm drains and joint trenches. Cost for both transportation and utility infrastructure are then combined in Figure 12 for each of three Tiers of investment. All storm drain, sanitary, sewer, water and joint trench costs are therefore combined here with costs for new roads.

Tier 1A improvements are the same for all three alternatives, but costs for Tier 1 and Tier 2 vary by alternative. For a definition of the three Tiers, see the previous section on Transportation Improvements.

Figure 12: Infrastructure Cost Analysis

	TIER 1A IMPROVEMENTS		
	ALTERNATIVE 1	ALTERNATIVE 2	ALTERNATIVE 3
Total Construction Costs	$23,500,000	$23,500,000	$23,500,000
Design, Soft Costs, Mapping (at 15%)	$3,530,000	$3,530,000	$3,530,000
Inspection, Staking, C/A (at 10%)	$2,350,000	$2,350,000	$2,350,000
Project Management (at 5%)	$1,180,000	$1,180,000	$1,180,000
TIER 1A GRAND TOTAL	**$30,560,000**	**$30,560,000**	**$30,560,000**

	TIER 1 IMPROVEMENTS		
	ALTERNATIVE 1	ALTERNATIVE 2	ALTERNATIVE 3
Total Construction Costs	$82,150,000	$97,150,000	$97,150,000
Design, Soft Costs, Mapping (at 15%)	$12,320,000	$14,570,000	$14,570,000
Inspection, Staking, C/A (at 10%)	$8,220,000	$9,720,000	$9,720,000
Project Management (at 5%)	$4,110,000	$4,860,000	$4,860,000
TIER 1 GRAND TOTAL	**$106,800,000**	**$126,300,000**	**$126,300,000**

	TIER 2 IMPROVEMENTS		
	ALTERNATIVE 1	ALTERNATIVE 2	ALTERNATIVE 3
Total Construction Costs	$625,000	$2,173,000	$2,173,000
Design, Soft Costs, Mapping (at 15%)	$90,000	$330,000	$330,000
Inspection, Staking, C/A (at 10%)	$60,000	$220,000	$220,000
Project Management (at 5%)	$30,000	$110,000	$110,000
TIER 2 GRAND TOTAL	**$805,000**	**$2,833,000**	**$2,833,000**

Notes:

1 Estimate based on Fehr & Peers November 17, 2011 South Fremont / Warm Springs Area Studies Transportation Infrastructure Improvements and associated Land Use Alternative Tier 1 Improvement Exhibits

2 All storm drain, sanitary sewer, water and joint trench are included in $/LF cost for new roads

3 Cost associated with Item D2 (Tesla Frontage Road) does not include land acquisition costs (estimated ROM of $6M)

FINANCIAL ASSESSMENT

A financial feasibility analysis was designed and conducted to characterize potential infrastructure financing issues associated with the build-out of three South Fremont/Warm Springs Study Area land use alternatives and the associated "backbone" infrastructure needs. The analysis drew conclusions at the Study Area-wide level based on the transportation and infrastructure analysis and findings.

Technical Findings

The key technical findings of the financial assessment include:

1. Substantial investment in new infrastructure will be required to serve new development under build-out of all three land use alternatives, estimated between $138 million and $160 million depending on the alternative.
2. The majority of these costs is associated with interchange improvements and automobile, pedestrian, and bicycle connections.
3. Even with significant infrastructure funding from Federal/State and regional sources, new development in the Study Area will need to fund substantial infrastructure cost, as shown in Figure 13.
4. There is no one land use alternative that is clearly superior based on this preliminary financial assessment and the City's financing strategy should be weighed against its other policy considerations.
5. Feasibility of the infrastructure financing will depend on the level of land values generated within the Study Area. An initial test of the Study Area's financing capacity relative to infrastructure and capital improvements obligations suggests feasibility challenges could occur if development and land values are at the lower end of the potential value range.
6. The City's existing development impact fee schedule suggests that new development in the Study Area would also need to provide substantial funding for its fair share of other citywide infrastructure and capital facilities improvements.
7. The fair share contributions to citywide capital improvements through the City's development impact fees are substantive. Reduction in this overall funding gap could be possible with more detailed consideration of the appropriate credits, reimbursements, and discounts associated with Study Area development under the citywide development impact fee program.
8. Reduction in scale of the infrastructure program, if practicable, could also improve development feasibility of the infrastructure component in the Study Area.
9. Like other large-scale brownfield redevelopment projects, additional public financing such as an Infrastructure Financing District may be necessary to support the infrastructure and capital improvements envisioned for the Study Area.

10. Without the regional funding through the passage of Measure B sales tax increase and extension, infrastructure financing will be substantially more difficult.

11. Development timing will be an important determinant of the Study Area's infrastructure financing capacity. The timing of the attraction of new uses/businesses to the Study Area is uncertain and will depend on the pace of the market recovery.

Figure 13: Total Infrastructure Development Cost Allocation

Land Use	Tier	Total Cost	Cost Allocation Assumptions		
			Project	Regional (1)	State/Federal
Interchange Improvements (2)					
I-680 / Mission Blvd Interchange	Tier 1	$26,000,000	$0	$26,000,000	$0
I-680 / Automall Pkwy Interchange	Tier 1	$39,000,000	$0	$3,900,000	$35,100,000
I-680 / Fremont Blvd Interchange	Tier 1	$19,500,000	$0	$1,950,000	$17,550,000
Subtotal		$84,500,000	$0	$31,850,000	$52,650,000
Local Street and Intersection Improvements					
South Grimmer Blvd / Warm Springs Blvd	Tier 1	$390,000	$390,000	$0	$0
Fremont Blvd / South Grimmer Blvd	Tier 1	$390,000	$390,000	$0	$0
Subtotal		$780,000	$780,000	$0	$0
New Traffic Signals (3)					
Fremont Blvd / Ingot St	Tier 1	$325,000	$162,500	$162,500	$0
South Grimmer Blvd / New N/S Road (Parcel 1)	Tier 1	$325,000	$162,500	$162,500	$0
Warm Springs Blvd / Reliance Way	Tier 1	$325,000	$162,500	$162,500	$0
Warm Springs Blvd / Corporate Way	Tier 1	$325,000	$162,500	$162,500	$0
Subtotal		$1,300,000	$650,000	$650,000	$0
Local Street Connections and New Streets					
2-Lane Research Ave extension to BART and Grimmer	Tier 1	$7,280,000	$3,640,000	$3,640,000	$0
3-Lane Tesla Frontage Rd conversion	Tier 1A	$12,350,000	$6,175,000	$6,175,000	$0
4-Lane Ingot St Boulevard Extension (Fremont Blvd to BART)	Tier 1	$9,100,000	$9,100,000	$0	$0
2-Lane Lopes Ct Widening (UPRR to Travis Pl)	Tier 1A	$3,900,000	$1,950,000	$1,950,000	$0
2-Lane Parcel 1 N-S Extension (Ingot ext. to S Grimmer Blvd)	Tier 1	$3,380,000	$3,380,000	$0	$0
Subtotal		$36,010,000	$24,245,000	$11,765,000	$0
Transit, Bicycle, and Pedestrian Improvements					
Bus Stop Enhancements (shelters, benches, lighting)	Tier 1	$130,000	$65,000	$65,000	$0
BART west side pedestrian access bridge	Tier 1A	$14,300,000	$0	$14,300,000	$0
Pedestrian improvement at key intersections	Tier 1	$325,000	$162,500	$162,500	$0
Tesla Factory canal bike/ped pathway	Tier 2	$1,185,600	$592,800	$592,800	$0
Bike/ped I-880 bridge crossing	Tier 1	$19,500,000	$0	$9,750,000	$9,750,000
Railroad Alignment Pathway	Tier 2	$826,800	$413,400	$413,400	$0
CL II bike path extension on Fremont Blvd (Ingot to I-880)	Tier 2	$812,500	$406,250	$406,250	$0
Subtotal		$37,079,900	$1,639,950	$25,689,950	$9,750,000
TOTAL INFRASTRUCTURE COST		$159,669,900	$27,314,950	$69,954,950	$62,400,000
Allocation		*100%*	*17%*	*44%*	*39%*

(1) Reflects regional funding sources such as Measure B or ACTC.
covering a share of public transit-related costs.
(2) Assumed to be covered by state and federal grants based on the historic funding allocation pattern.
(3) Does not include three traffic signals for which BART and citywide funding has already been identified.

Sources: Perkins + Will; BKF Engineers, and Economic & Planning Systems, Inc.

Financing Guidance

Consistent with the land use, transportation, and infrastructure analyses, the financial assessment represents a Study Area-wide, initial assessment designed to highlight potential financing challenges and solutions. In addition to the conduct of more detailed planning, transportation, and engineering analysis (all of which would further inform the financial picture), the City should consider the following key issues as further studies are conducted:

1. **Careful consideration should be given to the scale/geography of future infrastructure financing decisions.** The infrastructure improvements list highlights the Study Area-serving nature of many of the major improvements, including the connections across the railroads. Whether future planning efforts occur at a Study Area-wide level or within subareas, successful financing of these improvements may depend on financial contributions from development throughout the Study Area. As a result, Study Area level financing mechanisms, such as a new area development impact fee across the whole Study Area, may be appropriate even if planning and development evolves on a subarea basis.
2. **Some level of flexibility may be required to accommodate the broad range of sites, redevelopment challenges, and landowner preferences.** The Study Area includes a broad set of land with variations in parcel size, current uses (vacant vs. occupied), and locational character (adjacency to the Tesla Factory vs. adjacency to future BART station). Some financing tools may only be appropriate and/or applicable to certain subareas/parcels. For example, Community Facilities Districts will require landowner votes and, as such, may be best suited to large vacant or heavily under-utilized parcels.
3. **The application of the citywide development impact fees should be given careful consideration.** Citywide development impact fees provide an important source of funding for capital improvements throughout the City. The City may want to update its development impact fee once a new land use designation has been adopted for the Study Area. Decisions concerning the inclusion of Study Area infrastructure or other improvements (and the associated possibility for fee credits/fee investment in the Study Area) could have a substantial impact on the financing challenge/funding gap.
4. **The alternatives with residential development may provide an overall infrastructure financing benefit.** While the preliminary financing analysis does not point to a clear advantage for any one alternative, the inclusion of residential development in the land use program may support infrastructure financing. Specifically, the additional product diversity created, the higher potential improved land values, and the potential for faster absorption may provide a stronger development feasibility basis. Consistent with the point above, this will only be true if a financing strategy is devised Study Area-wide.
5. **The City should consider the establishment of an Infrastructure Financing District.** Without availability of redevelopment financing, IFDs may provide the best approach to closing funding gaps that remain after other measures have been taken. While IFDs are complex to establish and do directly impact property tax flows to the General Fund, there may be an opportunity for IFD financing to support Study Area development that also provides a net positive impact on the City's General Fund.

FISCAL AND ECONOMIC ANALYSIS

The fiscal and economic impacts analysis consists of three components: fiscal impact analysis; employment and wage analysis; and economic impacts. These analyses are tools to compare the relative fiscal revenues/costs and combination of economic benefits provided under each land use alternative. There are seven key findings that relate to each of the three analytical components. Each set is noted here along with the key charts or tables that relate to those findings.

Fiscal Impact Findings

The fiscal impact analysis examined the impact of growth/new development on the City's General Fund by projecting costs and revenues for the City under each alternative, thus arriving at the alternative's "net fiscal benefit", i.e. the net loss or gain to the City's General Fund. The key findings of the fiscal impact analysis presented along with relevant graphics to provide supporting data are as follows:

1. The net fiscal benefit is positive for all alternatives
   - ◊ Alternative 1 provides the highest revenue relative to costs
   - ◊ Alternative 3 provides the greatest total revenue
2. Property value increases drive tax revenue increases
   - ◊ Such revenues include property tax, property transfer tax and vehicle license fee revenues linked to property tax increases
3. Public safety collectively drives the greatest cost increases
   - ◊ Such costs include police and fire services

Figure 14: Comparison of General Fund Revenues and Costs

	Alternative 1	Alternative 2	Alternative 3
Revenues	$6,840,000	$8,360,000	$9,440,000
Costs	$3,570,000	$4,950,000	$5,400,000
Net Revenue	$3,270,000	$3,410,000	$4,040,000

Figure 15: Composition of Revenues by Alternative

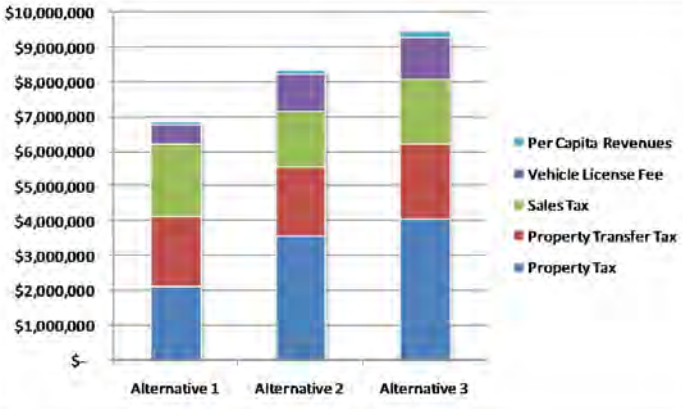
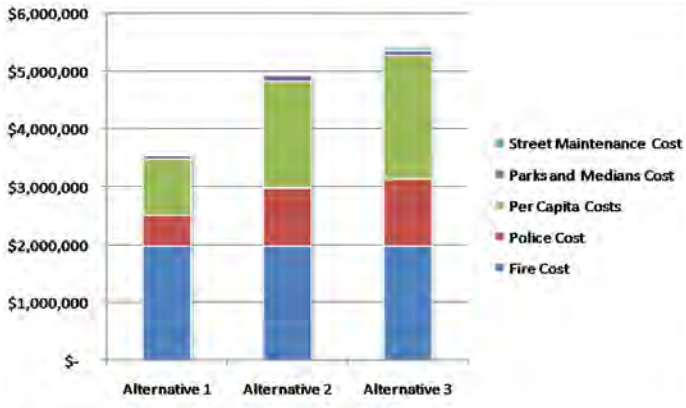


Figure 16: Composition of Costs by Alternative



Employment and Wage Findings

4. Alternative 1 represents the highest aggregate compensation due to the number of jobs.
5. Alternative 1 provides more production, distribution, and installation/repair/ maintenance jobs. Alternatives 2 and 3 include relatively more jobs associated with research and development and office uses (such as management, architecture and engineering, and the sciences). Alternative 3 also includes more jobs associated with retail, restaurants, and personal services.

Economic Impacts Analysis Findings

The economic impact analysis measures the "ripple effect" of a dollar circulating through the regional economy. It measures additional jobs, "output" (sales of goods/services/materials) and worker earnings in the Bay Area.

6. Alternative 1 provides the highest overall benefits
7. Alternatives 2 and 3 generate higher regional earnings, jobs, and output impacts per worker than Alternative 1, but total impacts for those alternatives are lower since they contain fewer jobs than Alternative 1."

Figure 17: Jobs and Average Wages

Land Use Designation	Study Area Jobs	Average Compensation per Job
Alternative 1	**23,200**	**$ 100,500**
Alternative 2	**17,700**	**$ 100,600**
Alternative 3	**18,800**	**$ 102,300**

Source: BLS, 2010 and 2011; Strategic Economics, 2011..

Figure 18: Top Occupations for Land Use Alternatives

Occupation Type	Alt 1 % of Total	Alt 2 % of Total	Alt 3 % of Total	Mean Annual Wage (Oakland-Fremont MSA)
Computer and Mathematical	26%	22%	22%	$85,400
Office and Administrative Support	16%	15%	15%	$41,370
Production	9%	9%	6%	$37,890
Installation, Maintenance, and Repair	9%	7%	7%	$53,130
Management	8%	9%	9%	$121,970
Architecture and Engineering	8%	9%	10%	$90,170
Sales and Related	7%	7%	7%	$43,420
Business and Financial Operations	7%	7%	7%	$77,810
Transportation and Material Moving	3%	3%	2%	$38,980
Life, Physical, and Social Sciences	2%	5%	6%	$79,470
Other	5%	7%	8%	N/A
Total (All Occupations)	100%	100%	100%	$56,360

Source: OES, 2010; BLS, 2010 and 2011; Strategic Economics, 2011.

Figure 19: Total Regional Economic Impacts of Land Use Alternatives

	Aggregate Earnings	Study Area and Regional Jobs	Output
Alternative 1	**$ 4,387,500,000**	**59,300**	**$ 13,825,800,000**
Alternative 2	**$ 3,488,100,000**	**49,000**	**$ 11,012,700,000**
Alternative 3	**$ 3,821,100,000**	**54,200**	**$ 12,002,500,000**

Source: Sources: BEA, 2011; BLS, 2010 and 2011; Strategic Economics, 2011.

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